

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE, THE DELAWARE DEPARTMENT OF NATURAL
RESOURCES AND ENVIRONMENTAL CONTROL (ENERGY DELAWARE OFFICE),
THE OFFICE OF MANAGEMENT AND BUDGET, AND THE CONTROLLER
GENERAL'S OFFICE**

IN THE MATTER OF INTEGRATED)	
RESOURCE PLANNING FOR THE)	
PROVISION OF STANDARD OFFER)	PSC DOCKET NO. 07-20
SUPPLY SERVICE BY DELMARVA)	
POWER & LIGHT COMPANY)	

COMMENTS OF ALAN MULLER ON "INTERIM IRP REPORT"

The report is actually entitled "INTERIM REPORT ON DELMARVA POWER IRP IN RELATION TO RFP," and *states "The central issue for the State Agencies at this time is whether they should direct Delmarva to negotiate a long-term power purchase contract with any of the bidders in the RFP process...."*

I do not agree that this is necessarily the central issue, but it unquestionably is the issue receiving the most public attention at this time. So I focus my comments on this question. I would like to emphasize that I am very interesting in the RFP process, and recommended on April 9, 2007 that "...the state agencies direct Delmarva Power to begin negotiating a PPA with Bluewater Wind." (COMMENTS OF ALAN MULLER AND OF GREEN DELAWARE ON DELMARVA POWER AND STATE AGENCIES GENERATION EVALUATION REPORTS, Docket 06-241).) However, my concerns are broader than the RFP and include the direct and indirect health and environmental consequences of present unwise policies.

Staff did not release the 71-page "PSC REVIEW AND RECOMMENDATIONS ON GENERATION BID PROPOSALS" until about 4:00 p.m. on May 2, 2007. This, Hearing Examiner O'Brien has appropriately extended the deadline for the filing of these comments.

I incorporate by reference into these comments the following previous filings, and ask that they be considered equally with this present writing:

COMMENTS OF ALAN MULLER ON INTEGRATED RESOURCE PLANNING, IN RESPONSE TO PSC ORDER 7122 DATED 23RD JANUARY 2007, Docket 07-20, Marcy 8, 2007

COMMENTS OF ALAN MULLER AND OF GREEN DELAWARE ON DELMARVA POWER AND STATE AGENCIES GENERATION EVALUATION REPORTS, Docket 06-241, April 9, 2007

RESPONSE OF ALAN MULLER TO APRIL 6, 2007, LETTER OF HEARING EXAMINER O'BRIEN, Docket 07-20, April 13, 2007

Integrated Resource Planning is, conceptually, a broad process to determine the “big picture” of how electric energy services should be provided.

ECURSA (or the “Act”) defines IRP at Sec. 2:

“Integrated resource planning” means the planning process of an Electric Distribution Company that systematically evaluates all available supply options, including but not limited to: generation, transmission and Demand-Side Management programs, during the planning period to ensure that the Electric Distribution Company acquires sufficient and reliable resources over time that meet their customers’ needs at a minimal cost.”

Thus, logically, the IRP should have come before the RFP. Logically, also, other dockets involving demand side investments and revenue decoupling, and other proceedings such as the “Sustainable Energy Utility” task force should come “under” the IRP process. This is why we urged the Staff and Commission NOT to docket demand side investment for Delmarva Power (“Blueprint for the Future”) separately.

The handling of these related matters separately gives a “divide and conquer” strategic advantage to Delmarva Power (and to Staff), making it hard for the press and public to follow and influence what is really going on.

I was a participant in earlier rounds of IRP for Delmarva Power. I felt that the loss of IRP was one of the major negative consequences of the unwise “restructuring” of Delmarva Power in 1999-2000, an action heavily lobbied for by Delmarva itself.

“Least cost” must be construed broadly

IRP is important because it provides a potential means for the public interest to play a larger role in setting electric energy policy for Delaware. Traditionally such policies in Delaware have been what Delmarva Power (and, to a lesser extent, other utilities) wanted them to be. Thus, the profits of Delmarva Power have taken precedence over the welfare of the state. Here are few examples of the consequences of that:

Excessive electricity consumption

“Delaware has the *highest* residential sector electricity intensity among the eight states (NY, CA, MA, NJ, CT, VT, PA, DE). New York, California, Massachusetts and New Jersey households use one-half or less of the electricity used by Delaware homes, thanks to well-funded and broad-based energy efficiency and conservation policy regimens.”

NY	0.456
CA	0.498

MA	0.501
NJ	0.533
CT	0.570
PA	0.830
DE	1.000

(THE SUSTAINABLE ENERGY UTILITY: A DELAWARE FIRST. A report to the Delaware State Legislature by the Sustainable Energy Task Force., page 48)

Severe health impacts

In a letter dated February 9, 2005, Jaime H. Rivera, Director of the Delaware Division of Public Health, wrote:

"EPA's consultants estimate that fine particle pollution from power plants shortens the lives [kills] of 95 Delaware residents each year. In our state alone, pollution from power plants causes 13,106 lost work days, 87 hospitalizations and 2256 asthma attacks every year, 99 of which are so severe they require emergency room visits. ... Sadly, children are most susceptible to the detrimental effects of power plant pollution. In Delaware, 142,099 children live within 30 miles of a plant, the area in which the greatest health impacts are felt. Additionally, researchers have found that infants in areas with high levels of particulate matter pollution face a 26 percent increased risk of Sudden Infant Death Syndrome and a 40 percent increased risk of respiratory death."

Dr. Rivera's letter mentions only a fraction of the problem. Power plant pollutants cause cancer, strokes, heart attacks, birth defects, "premature delivery," reduced intelligence, and other health problems.

Environmental damage

Here I mention only two examples: Much of Delmarva Power's supply comes from the Edge Moor Power Plant (Conectiv Delmarva Generation) and the Salem I and II reactors (PSEG). These facilities lack cooling towers, and take out of the Delaware River a maximum of about 4 billion gallons per day of cooling water. This has the effect of killing fish eggs and larva as they pass through the condensers, eliminating millions of "adult equivalent" fish per year from the Delaware Estuary. Such facilities could not be built today, just as coal units without "scrubbers" could not be built.

Conectiv Delmarva Generation is fighting hard, with appeals pending, against a State of Delaware regulation requiring reduction of smokestack emissions. (So is NRG Energy.)

The use of these dirty, unhealthy, obsolete generation sources by Delmarva Power contributes to Delaware's health and environmental problems.

"Least cost" must include the "externalities" of power generation such as health and environmental damage.

There is an inherent conflict between Delmarva Power's desire to pursue its own business plan and the public interest in an IRP process that can identify true "lease cost" for ratepayers, considering not only utility bills per se but health and environmental costs. Thus, it does not surprise me that Delmarva Power would have filed a very inadequate IRP.

We recommended on March 8, 2007 that the Commission should:

"Reject the present DPL compliance filing as fundamentally lacking. (A letter from James Geddes dated December 13, 2006 outlines a few salient deficiencies in the filing. These have not, in our opinion, been remedied by subsequent materials.)"

Fundamentally, the IRP filing proposes to meet future needs through demand side (efficiency improvements and load shifting to even out peak loading) investments. This, of course, sounds good to environmental interests. And it could be done. But I don't think Delmarva Power actually plans this.

On the supply side (in the region), Delmarva Projects another nuclear reactor, onshore wind in Delaware, very limited retirement of old, dirty coal units, and other circumstances that are just not going to happen.

On the demand side, Green Delaware compared the Delmarva Power "Blueprint for the Future" filings with the DSM potential projected by the Sustainable Energy Utility task force (Alert 544: Green Delaware's analysis of Delmarva Power's "Blueprint for the future" February 8, 2007, http://greendel.org/item.xhtml?name=alert_0544).

Capacity

Delmarva IRP	71 megawatts (2.5 percent)
SEU	300 to 1000 megawatts

Energy

Delmarva Power IRP	110,000 megawatt hours (1.2 percent)
SEU	"at least" 2.2 million megawatt hours (35 percent)

In short, neither the supply side nor the demand side information in the IRP is credible. I suspect the real intent is to (1) continue the status quo of buying power for resale through bid (often from another unit of PEPCO), and (2) maximize electricity sales.

Thus, we concur with Hearing Examiner O'Brien that a contested case with discovery and evidentiary hearings is necessary to accomplish a "substantial" IRP proceeding as the public interest requires.

So far, the "agencies" have not paid serious attention to the health and environmental benefits of displacing high-emissions generation (coal) with wind and DSM. We are disappointed by the failure of the Delaware Division of Public Health and the DNREC to "weigh in."

Health costs

A May 3rd letter from Jonathan Levy of the Harvard School of Public Health (and Willett Kempton (University of Delaware) suggests that the health benefits of the proposed Bluewater Wind are at least twice, and likely far more, than the additional costs identifies by the Independent Consultant. They also note that “the health benefits are proportional to the size of the wind park....”

In regard to the “PSC STAFF REVIEW AND RECOMMENDATIONS ON GENERATION BID PROPOSALS DOCKET No. 06-241, May 2, 2007.

I am in broad general agreement with the conclusion (pages 69 to 71).

I agree that “Delaware needs additional generation in Delaware,” NOT because of any absolute shortfall of capacity but because of the need to offset operation of the existing, very dirty and damaging capacity now being operated in Delaware.

Many questions are being raised in many quarters about the PJM “Reliability Pricing Model.” I am uncertain, frankly, but suspect that this benefits the parties least deserving of benefit at public expense: the operators of old, dirty units. This raises important questions as to whether the public interest is adequately represented in the PJM.

The mention of “rolling blackouts” on page 69 is misleading due to a failure to mention the transmission upgrades and other measures since taken.

I agree that Delmarva Power should be required to negotiate with Bluewater Wind but doubt the wisdom of reducing the Bluewater Wind project from 600 MW to 200-300. Because of economics of scale in construction and operation, because all possible output will offset unhealthy existing generation, and because health and other benefits, as Kempton and Levy point out, are “proportional to the size of the wind park,” reducing the size of the project reduces the public benefits without any countervailing justification.

Further, the Staff originally called for 400 MW size limits in the RFP, citing, among other considerations, economics of scale. Some explanation, beyond that offered, for the proposed 2-300 MW sizing is needed.

I agree that wind capacity should be paired with gas to provide a dispatchable “product. However, there is apparently no shortage of existing gas capacity in the area. Indeed, FPL has recently constructed a 700 MW gas-burning facility just North of the Delaware state line.

Therefore, I question the recommendation to include a Combined Cycle Gas Turbine in the negotiations. If, however, this is justified, locating in Southern Delaware makes sense. It also makes sense to consider a “synchronous condenser” unit because of the ability of such units to provide reactive power (leading power factor).

Conclusions

- (1) A robust, “contested” IRP proceeding offers important potential benefits to Delaware;
- (2) Delmarva Power should be directed to negotiate in good faith with Bluewater Wind for a 600 MW wind project.
- (3) The Commission and other agencies should be prepared for the possibility that Delmarva Power will NOT negotiate in good faith and further regulatory actions may be needed.
- (4) It should be understood that many regulatory steps stand between negotiation of a PPA with Bluewater Wind and the construction of such a project. Regulatory requirements must be fully met, and public participation not bypassed or reduced.

I would like to reserve the right to submit additional materials.

Respectfully submitted,

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